

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

690 Walnut Ave.St. 150

Vallejo, CA 94592-1133

(707) 649-5453

(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-010956**Date Inspected:** 06-Jan-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Li Yang**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Joe Alaniz was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

OBG Assembly Yard

6BW+6CW

Flux Core Arc Welding (FCAW) welding was performed on weld joint 004 located at OBW6C cross beam side of segment. Welder is identified as Mr. Li Shuqiang (053609). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-T-2233T.

6CW

Flux Core Arc Welding (FCAW) welding was performed on weld joints 014, 123 and 023 located at SEG0315 between panel points 44 & 45. Welder is identified as Mr. Yun Chuanshan (050316). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-T-2233-Tc-U4b-F.

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Flux Core Arc Welding (FCAW) welding was performed on weld joints 096, 045 and 050 located at SEG031J between panel points 44 & 45. Welder is identified as Mr. Yun Chuanshan (050316). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-T-2233-Tc-U4b-F

Flux Core Arc Welding (FCAW) welding was performed on weld joint 021 located at SEG031B between panel points 43 & 44 cross beam side of segment. Welder is identified as Mr. Yun Chuanshan (220067). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-T-2231T and WR9640.

### 6CE

Shield Metal Arc Welding (SMAW) welding was performed on weld joints 052 and 053 located at BP061. Welder is identified as Mr. Du Hengyou (037743). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-T-2132.

Flux Core Arc Welding (FCAW) welding was performed on weld joint 005 located at OBW6A on cross beam side of segment. Welder is identified as Mr. Li Shuhai (066456). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-T-2112-FCM-1.

Flux Core Arc Welding (FCAW) welding was performed on weld joints 002 and 001 located at OBW6C on counter weight side of segment. Welder is identified as Mr. Wang Yuli (068858). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-T-2132T.

### 6BW

Flux Core Arc Welding (FCAW) welding was performed on weld joint 032 located at SEG029B on cross beam side of segment. Welder is identified as Mr. Li Xuehua (200676). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS- B-T-2233-Tc-U4b-F.

### 7AE

Flux Core Arc Welding (FCAW) welding was performed on weld joints 023 and 024 located at BP170. Welder is identified as Mr. Li Shouhai (066456). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-T-2112-FCM-1.

Flux Core Arc Welding (FCAW) welding was performed on weld joints 001~012 located at SP610. Welder is identified as Mr. Wang Yuli (068858). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-T-2132.

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5BE+5CE

Shield Metal Arc Welding (SMAW) repair welding was performed on weld joint 008 located at OBE5A bottom plate of segment. Welder is identified as Mr. Li Wenguo (066261). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-Repair-1.

5BW+5CW

Shield Metal Arc Welding (SMAW) repair welding was performed on weld joint 007 located at OBW5A side plate on the counter weight side of segment. Welder is identified as Mr. Di Lu (048659). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-Repair-1.

NDT Observation

This QA Inspector observed ZPMC Ultra Sonic Testing (UT) Technician performed UT on various locations in the trial assembly yard. Y location and indications are as followed:

6AW+6BW

1. Bottom plate weld joint OBW6B-003.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

### Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang (134-8257-0045), who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Alaniz,Joe	Quality Assurance Inspector
<b>Reviewed By:</b>	Miller,Mark	QA Reviewer

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